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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTI-COMPONENT VACCINE TO PROTECT AGAINST DISEASE CAUSED BY HAEMOPHILUS INFLUENZAE AND MORAXELLA CATARRHALIS

(57) Abstract: A multi-valent immunogenic composition confers protection on an immunized host against infection caused by both Haemophilus influenzae and Moraxella catarrhalis. Such composition comprises at least four antigens comprising at least one antigen from Haemophilus influenzae, and at least one antigen from Moraxella catarrhalis. Three of the antigens are adhesins. High molecular weight (HMW) proteins and Haemophilus influenzae adhesin (Hia) proteins of non-typeable Haemophilus and a 200 kDa outer membrane protein of Moraxella catarrhalis comprise the adhesin components while the other antigen is a non-proteolytic analog of Hin47 protein. Each component does not impair the immunogenicity of the thers. The multi-valent immunogenic composition may be combined with DTP component vaccines, which may also include non-virulent poliovirus and PRP-T, to provide a component vaccine without impairment of the immunogenic properties of the other antigens.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K39/116 A61P31/04

//(A61K39/116,39:104,39:102)

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, MEDLINE, EMBASE

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her documents are listed in the continuation of box C.	Patent family members are tisted	i in annex.
ent defining the general state of the art which is not defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another received reason (as specified).	"T" later document published after the int or priority date and not in conflict wit cited to understand the principle or ti invention  "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the document of particular relevance; the	n me application out heory underlying the claimed invention of be considered to locument is taken alone claimed invention
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Date of malling of the international search report

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document published prior to the international filing date but later than the priority date claimed

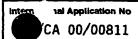
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV-Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni,

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### INTERNATIONAL SEARCH REPORT



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